

SAFETY DATA SHEET

GHS SDS Date: 06/24/2017

SDS Name: Kapp Comet Flux™ for Metals Other Than Aluminum 350–550°F / 177–288°C

SDS Number: 550

Page 1 of 4

SECTION I: PRODUCT AND COMPANY INFORMATION

Product Name: Kapp Comet Flux™ for Metals Other Than Aluminum 350–550°F / 177–288°C

CAS Number:

Component	CAS Number	Component	CAS Number
Zinc Chloride	7646-85-7	Monoethanolamine, HCl	2002-24-6
Hydrochloric Acid	7647-01-0	Ammonium Chloride	12125-02-9

Company Identification: Kapp Alloy and Wire, Inc., 1 Klein Street / PO Box 1188, Oil City, PA 16301

Contact: Telephone: 814-676-0613 or 1-800-327-6533, Fax: 814-676-5565, Email: info@kappalloy.com**SECTION II: HAZARD INFORMATION**

GHS05

Eye Damage 1 H318 Causes serious eye damage.



GHS07

Skin Irritation 2 H315 Causes skin irritation.



Aquatic Acute and Chronic Toxicity 1

H401: Toxic to aquatic life

H411: Toxic to aquatic life with long-lasting effects



GHS05



GHS07

**Label Elements:** Hazard Pictograms

Labelling according to Regulation (EC) No 1272/2008

Signal word: **Danger**

H302 - Harmful if swallowed.

H312 - Harmful in contact with skin

H314 - Causes severe skin burns and eye damage.

H319 - Causes serious eye irritation

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

H401: Toxic to aquatic life

H411: Toxic to aquatic life with long-lasting effects

Precautionary statements:

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician, if you feel unwell.

SAFETY DATA SHEET

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Page 2 of 4

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P501 - Dispose of contents/container in accordance with local/national/international regulations.

Target Organ Statement

- Causes severe burns to skin, eyes, and respiratory system

Effects of Chronic Exposure

- Contact burns, irritation to skin (scarring), eyes & respiratory system.
- Possible liver and kidney effects.

SECTION III: COMPOSITION / INGREDIENTS

*(Hazardous components 1% or greater; Carcinogens 0.1% or greater)

COMPONENT	CAS NO.	OSHA PEL	HAZARD
Zinc Chloride	7646-85-7	1	Corrosive
Hydrochloric Acid	7647-01-0	7	Corrosive
Monoethanolamine, HCl	2002-24-6	3	Eye Irritant
Ammonium Chloride	12125-02-9	10	OSHA

PEL = Permissible Exposure Limit; NA = Not Applicable; NE = Not Established; NAIF = No Applicable Information found

SECTION IV: FIRST AID MEASURES

Ingestion: Call a physician or Poison Control Center. Advise of chemical composition (Section III). Do not induce vomiting. Give large quantities of water, milk, or 5% sodium bicarbonate solution.

Skin: Promptly flush with water to remove any residue. If a rash or burn develops, consult a physician. Product is corrosive.

Inhalation: Terminate exposure and remove to fresh air. Call physician; advise of chemical composition (section III). Provide oxygen.

Eyes: Flush with water for at least 15 minutes to remove irritant. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a physician.

SECTION V: FIRE FIGHTING MEASURES

Flash point & Methods Used: N/A
Auto Ignition Temperature: N/A
Flammability Limits: (in air, % by volume) •LEL: N/A, •UEL: N/A

Extinguisher Media: Water, fog, or foam.

**DO NOT USE WATER ON MOLTEN METAL:
LARGE FIRES MAY BE FLOODED WITH WATER FROM A DISTANCE**

Special Fire Fighting Procedures Full protective equipment required. May release zinc oxide and HCl fumes. Toxic metal halide fumes produced.

Unusual Fire and Explosion Hazards Dense smoke may be generated.

EMERGENCY PHONE NUMBER: CALL CHEMTREC (800) 424-9300 – AVAILABLE 24 HOURS

SECTION VI: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is spilled or released:

- Contain, absorb, sweep-up, and dispose. Flush area to chemical sewer. Soda ash (sodium carbonate) is a neutralizer for acid. Environmental Precautions: Avoid release to the environment. Collect spillage.

SAFETY DATA SHEET

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Page 3 of 4

SECTION VII: HANDLING AND STORAGE

Precautions to be taken in handling and storage:

- Store flux in a well-sealed container at ambient conditions, with temperatures between 35-80°F (2-27°C). Wash thoroughly after handling to remove all residue. No eating or smoking in work area.

Other Precaution / Special Handling:

- Do not take internally. Avoid eye and skin contact. Avoid inhaling mist or dust. Professionally wash contaminated clothing before re-use.

SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Use NIOSH-approved breathing apparatus to prevent exposure to dusts and fumes.
 Eye Protection: Approved safety glasses/welding goggles, appropriate to your procedure, should be worn.
 Ventilation: Local Exhaust: YES; Mechanical: YES Maintain airflow away from user to remove all fumes and vapors, so that the PEL is never exceeded. Special: Conform to your regulatory statutes.
 Other: Full protective equipment normally used in soldering (/applicable) operations so as to prevent any contact. Review operations to avoid contact with hazardous gas, liquids or solids. *Conform to all local, state, federal regulations.

See also: 29 CFR 1910.132 - 29 CFR 1910.140. *Personal Protective Equipment*
 29 CFR 1910.251 - 29 CFR 1910.257. *Welding, Cutting and Brazing*

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: ~500°F / 260°C @ 760 mmHg
 Specific Gravity: (H₂O = 1 @ 72°F): 1.38
 Active Temperature Range: Active between 350–550°F / 177–288°C
 Solubility in Water: Appreciable
 Evaporation Rate (Butyl Acetate = 1): <1
 Percent volatiles by volume: N/E
 Appearance and Odor: Pale yellow water solution with no significant odor.
 Use: General purpose low temperature soft soldering flux, corrosive residue.

SECTION X: STABILITY AND REACTIVITY

Stability: Stable
 Conditions to avoid: None
 Incompatibility (materials to avoid): Strong Acids, Strong Alkalis
 Hazardous Decomposition Products: None; Hazardous Polymerization will not occur

SECTION XI: TOXICOLOGY INFORMATION

Swallowing: Can cause damage to digestive system. Corrosive to mucous membranes.
 Skin Absorption / Contact: Burns; immediate hazard.
 Inhalation: Irritates respiratory system, coughing, & sneezing. Aggravates existing lung disorders.
 Eye Contact: Irritation to eyes, tearing, burns eye surfaces, corrosive to eyes. May cause blindness.

*0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme

	Health	Flammability	Reactivity	Special
NFPA Rating	1	0	1	0
HMIS Rating	1	0	1	0

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Page 4 of 4

SECTION XII: ECOLOGY INFORMATION

This product will not biodegrade. Slight ecological hazard. In high concentrations, this product may be dangerous to plants, wildlife, and/or aquatic life. General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Danger to drinking water if large quantities leak into the ground. **Results of PBT and vPvB assessment:** PBT: Not applicable; vPvB: Not applicable.

SECTION XIII: DISPOSAL CONSIDERATION

Waste Disposal Method

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Dispose of according to federal, state, local, international, and OSHA regulations.

SECTION XIV: TRANSPORT INFORMATION

Ground - DOT Proper Shipping Name:

Corrosive liquid, N.O.S. (Zinc Chloride, Hydrochloric Acid)

Hazard Class: 8

ID & Packaging Group Number: UN 1760, PG III

ERG Guide Number: 60

Air - IATA Proper Shipping Name:

Corrosive liquid, N.O.S. (Zinc Chloride, Hydrochloric Acid)

Hazard Class: 8

ID & Packaging Group Number: UN 1760, PG III

ERG Guide Number: 60

SECTION XV: REGULATORY INFORMATION**SARA Title III Program:**

- This product contains the following toxic chemicals subject to the reporting requirements of EPCRA of 1986 and 40 CFR 372

CHEMICAL NAME	CAS NO.	COMPOSITION
Zinc Compounds	N/E	< 50%
Hydrochloric Acid	7647-01-1	< 20%

TOXIC SUBSTANCE CONTROL ACT: All components of this compound are listed within the TSCA inventory.**RoHS, REACH, and REACH-SVHC Compliance:**

This Product is RoHS and REACH Compliant. This product is free of REACH-SVHC substances.

SECTION XVI: OTHER INFORMATION

This information must be included in all SDS that are copied and distributed for this material.

**GOOD HOUSEKEEPING PROCEDURES SHOULD BE MAINTAINED.
PERSONNEL SHOULD WASH THOROUGHLY BEFORE SMOKING OR EATING
FOOD AND DRINK SHOULD NOT BE CONSUMED, TOBACCO PRODUCTS USED, OR COSMETICS
APPLIED IN AREAS WHERE EXPOSURES EXIST.**

Please retain this sheet for your files. Kapp Alloy maintains a file of Safety Data Sheets (SDS) for each alloy produced in compliance with Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) & various right-to-know laws.

The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to Kapp Alloy and Wire, Inc. at the time of issue. It is our policy to include an SDS with initial orders for each product. This submission is to become a matter of record and need not accompany subsequent shipments for the same product to the same customer. The information contained on this sheet is intended solely for employee health and safety education and not for contract specification purposes. No warranty, guarantee, or representation is made by Kapp Alloy and Wire, Inc., nor does Kapp Alloy and Wire, Inc. assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. Should you need additional information, contact us.